

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF GEORGE CLAUSS BLVD. AND QUARTERFIELD PARK ROAD IN ANNE ARUNDEL COUNTY. GEORGE CLAUSS BLVD. IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR NORTHBOUND GEORGE CLAUSS BLVD, SIDE STREET SPLIT PHASING AND AN EASTBOUND RIGHT TURN OVERLAP PHASE. VIDEO DETECTION WILL BE USED. THIS INTERSECTION WILL BE INTERCONNECTED TO THE INTERSECTION OF MD 174 AND THE I-97 SOUTHBOUND RAMPS.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND TWO (2), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT 410-787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
5 CY	TEST PIT EXCAVATION
220 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
2 EA	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE
1 EA	FURNISH AND INSTALL 500 FT. VIDEO DETECTION CABLE
3 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
34 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
2 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM
2 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
9 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
2 EA	FURNISH AND INSTALL 50 FT. MAST ARM AND POLE
2 EA	FURNISH AND INSTALL 70 FT. MAST ARM AND POLE
4 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
3 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN
3 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
210 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
150 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
230 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
380 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
18 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
420 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL
50 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 A.W.G.)
11 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
280 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE - UNDERGROUND
8 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
100 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
1400 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
380 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.) - TRAY CABLE
1 EA	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER
2 EA	FURNISH AND INSTALL 4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
4 EA	FURNISH AND INSTALL D3-2 DUAL FACE SIGN (VAR. X 16") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-S(L) SIGN (30" X 36") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-S(R) SIGN (30" X 36") - MAST ARM MOUNT

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

M. KIM TRAN	MR. CHARLES GEORGE
AS STANT DISTRICT ENGINEER - TRAFFIC	ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1003	(410) 841-1002

M. JOHN MAYS
AS STANT DISTRICT ENGINEER - UTILITIES
(410) 841-1005

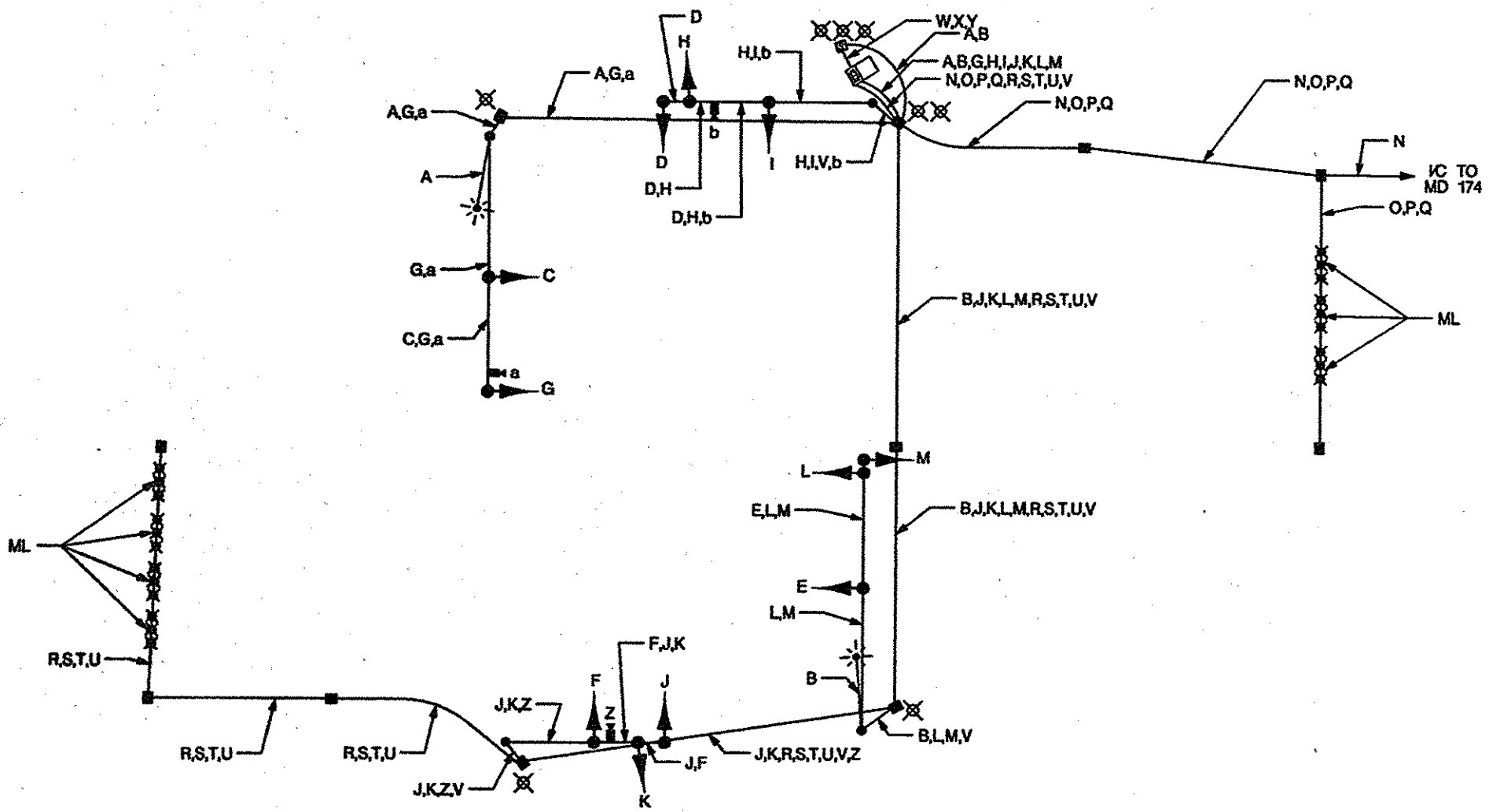
CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.	MR. EUGENE BAILEY
CHIEF, TRAFFIC OPERATIONS	TEAM LEADER SIGN OPERATIONS
(410) 787-7630	(410) 787-7676

MR. ROBERT SNYDER	MS. DARLENE EIDE
AS STANT DIVISION CHIEF,	SUPPLY OFFICE
TRAFFIC OPERATIONS	SIGNAL SHOP WAREHOUSE
(410) 787-7631	(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

WIRING DIAGRAM



WIRING KEY

A-B	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
C-F	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G-M	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
N	12-PAIR VOICE GRADE INTERCONNECT CABLE
O-U	MICRO-LOOP PROBE LEAD-IN STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
V	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
W-Y	VIDEO DETECTION CABLE
Z-b	MICRO-LOOP PROBE
ML	GROUND ROD

PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11
PHASE 1 & 6	G	G	R	R	R	R	R	R	R	R	R
1 & 6 CHANGE	G	G	R	R	R	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	R	R	R
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	R	R
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR

	1	2	3	4	5	6	7	8	9	10	11
PHASE 1 & 6	G	G	G	R	R	R	R	R	R	R	R
1 & 6 CHANGE	G	G	G	R	R	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	R	R	R
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	R	R
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR

1 RE LINE 32207
Corrected signal head numbering and phasing chart.

TRAFFIC CONCEPTS INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473
EMAIL: TRAFFIC.CONCEPTS@COMCAST.NET

SHA		STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION	
		OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION	
GENERAL INFORMATION PLAN GEORGE CLAUSS BLVD. AND QUARTERFIELD PARK ROAD			
SCALE	NONE	DATE	1-21-05
		CONTRACT NO.	BW 996M82
DESIGNED BY	T. ZAYDEL	COUNTY	ANNE ARUNDEL
DRAWN BY	T. ZAYDEL	LOGMILE	
CHECKED BY	K. SCHMID	T.I.M.S. NO.	
F.A.P. NO.	NA	TOD NO.	
DRAWING NO. TS-4491 GI		SHEET NO. OF	